SOUTH DAKOTA ORAL HEALTH SURVEY 2002-2003



DONEEN HOLLINGSWORTH, SECRETARY SOUTH DAKOTA DEPARTMENT OF HEALTH

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OFFICE OF HEALTH PROMOTION, SOUTH DAKOTA DEPARTMENT OF HEALTH

ACKNOWLEDGEMENTS

The main preparer of this report was:

Kathy Phipps, Dr. PH ASTDD Data Coordinator PO Box 1006 Morro Bay, CA 93443 Tel: 805-771-9788

Fax: 805-771-9843

Email: krp123@charter.net

with the following South Dakota Health Department personnel as main contributors to the development of this report:

Colleen Winter Administrator, Office of Health Promotion

Julie Ellingson Oral Health Coordinator
Mynna Kightlinger Cancer Registry Coordinator

Mary Sarvis Policy Analyst

Barb Buhler Public Information Officer Mark Gildemaster Management Analyst

Kathlene Mueller Manager Data, Statistics & Vital Records

/ State Registrar

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This report is also available on the DOH website:

http:/www.state.sd.us/doh/oralhealth

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INTRODUCTION

Tooth decay is an infectious disease affecting children and adults. Although dental caries (tooth decay) is largely preventable, it remains the most common chronic childhood disease, 5 times more common than asthma. This health problem begins early. National statistics show that 17 percent of children aged 2-4 years have already had decay. By the age of 8, approximately 52 percent of children have experienced decay, and by the age of 17, dental decay affects 78 percent of children. Once established, the disease requires treatment. A cavity only grows larger and more expensive to repair the longer it remains untreated.

Dental disease is a serious public health issue and affects overall health and productivity. It can lead to pain and disfigurement, low self-esteem, lost school days, nutritional problems and in the case of periodontal disease, possible cardiac complications.

Many South Dakotans now enjoy markedly better oral health than their parents did. However, certain segments of the population (e.g., those who are poor, who are members of racial or ethnic minority groups, or who are elderly) still have severe dental decay, much of which remains untreated. *Healthy People 2010* seeks to eliminate these disparities so that all Americans receive the benefits of good oral health. Surveillance of third graders is representative of the state of oral health among children and in line with the HP2010 Objectives.

In 2002 the South Dakota Department of Health established an oral health program within the Office of Health Promotion. The purpose of the program is to improve the oral health of South Dakotans by addressing dental health needs such as access to care, workforce development and shortage needs, and education for consumers and professionals. This is a report of the second oral health survey which was conducted as a follow up to the initial 1995-1997 survey.

SUMMARY

During the 2002-2003 school year, the South Dakota Department of Health conducted a statewide oral health survey of third grade children in public, private and Bureau of Indian Affairs (BIA) elementary schools. Thirty-six elementary schools were randomly selected and 35 agreed to take part in the survey. Thirty-six dentists and 4 dental hygienists voluntarily screened those third graders who returned a positive consent form. A total of 801 third graders returned the questionnaire/consent form and 710 were screened (71 percent of all third graders enrolled in the 35 participating schools). Actual screening dates were in April and May of 2003.

Key Findings

- ✓ Dental decay is a significant public health problem for South Dakota.
 - 67 percent of the third graders had cavities and/or fillings (decay experience).
 - 30 percent of the third graders had untreated dental decay (cavities).
- ✓ While dental sealants are a proven method for preventing decay, many of South Dakota's third graders do not have access to this preventive service.
 - 50 percent of the third graders had dental sealants.
- ✓ A large proportion of South Dakota's third graders are in need of dental care.
 - 30 percent of the third graders were in need of dental care including almost
 5 percent that needed urgent dental care because of pain or infection.
- ✓ Many of South Dakota's third graders have limited access to regular dental care.
 - 82 percent of the parents reported that their child had seen a dentist in the last 12 months, while 13 percent had not been in the last year and 5 percent of the third graders had never been to a dentist.
 - The primary reason for not seeing a dentist in the last year was cost.
- ✓ The majority of South Dakota's third graders have some type of coverage for dental care.
 - 76 percent of the parents reported that they have some type of dental insurance coverage for their child including private dental insurance, Medicaid and/or Indian Health Service.

- ✓ Third graders who have been to the dentist in the last year have better oral health than those who have not been to the dentist in the last year.
 - Third graders who had been to the dentist in the last year were less likely to have untreated decay and more likely to have dental sealants.
- ✓ Non-white third graders have poorer oral health.
 - Compared to white non-Hispanic third graders, a significantly higher proportion of American Indian third graders have decay experience (64 percent vs. 83 percent) and untreated decay (26 percent vs. 57 percent).
- ✓ Type of insurance coverage affects a child's oral health.
 - Compared to third graders with private dental insurance, a significantly higher proportion of third graders who pay for their dental care through government insurance or cash have untreated decay (19 percent vs. 45 percent and 35 percent).
- ✓ Third graders in lower income schools tend to have poorer oral health.
 - 50 percent of third graders in lower income schools (≥ 50 percent eligible for the free/reduced price meal program) had untreated decay compared to only 12 percent of third graders in higher income schools (≤ 20 percent eligible for the free/reduced price meal program).

Comparisons of the 2003 Data with the 1995-1997 Survey:

- Decay experience: 67 percent of the third graders surveyed have had decay in the 2003 survey compared to 63 percent in 1995-1997.
- Need for dental care: 30 percent of the third graders in the 2003 survey were in need of dental care compared to 33 percent in 1995-1997.
- Sealants: 50 percent of third graders in the 2003 survey had dental sealants compared to 44 percent in 1995-1997.

These comparisons show that while there has been measurable improvement in the percentage of children having dental sealants and a small decrease in the percentage with cavities, the number of children with a history of dental caries has increased. This could indicate that even with sealants, there must be other preventive measures, such as dietary changes, regular brushing and flossing, and regular dental visits to reduce the burden of dental caries among our children.

METHODS

Sampling: An electronic list of all elementary schools in South Dakota was obtained from the Department of Education. The sampling frame was limited to public, private and Bureau of Indian Affair schools (425 schools and approximately 9,900 children). The sampling frame was then further limited to those schools with three or more students in third grade (351 schools and approximately 9,800 children).

Schools in the sampling frame were ordered by percent of children eligible for the free and/or reduced price meal program then by school district number. Thirty-six elementary schools were randomly selected for participation in the oral health survey. If a school refused, a replacement school was randomly selected from the same sampling strata.

One of the schools, along with its replacement, refused to participate resulting in 35 schools with an enrollment of 994 children in third grade. Only those children that returned a positive consent form were screened.

The appendix contains a listing of the schools that participated, a map showing the location of the schools, the screening form used for the survey, the consent form and the dental assessment notification form.

Screening Methods: Forty volunteer dentists and dental hygienists completed all of the screenings. The screenings were completed using gloves, a hand held flashlight, and disposable mirrors. If necessary, a cotton tip applicator was used to remove excess debris while checking for the presence of dental sealants. The diagnostic criteria outlined in **Basic Screening Surveys: An Approach to Monitoring Community Oral Health** were used.

Data Management and Analysis: Epi Info 6.04, a public access software program developed and supported by the Centers for Disease Control and Prevention, was used to enter and analyze the data. To account for differences in response rates between schools, the data were adjusted for non-response. The number of children enrolled in each school was divided by the number of children screened to obtain the non-response sampling weight for each school.

RESULTS (Table 1)

The total third grade enrollment in the 35 participating schools was 994. Of these, 801 returned a questionnaire/consent form and 710 third graders were screened (71 percent response rate). The third graders screened ranged in age from 7-10 years with a mean of 8.8 years. About half of the third graders screened were female (51 percent) and the majority (84 percent) were white non-Hispanic. Refer to Table 1 (below) for further demographic information.

In terms of eligibility for the free and/or reduced price meal program, the schools participating in the oral health survey were representative of the state as a whole. Approximately 41 percent of all South Dakota's elementary school third graders receive free and/or reduced price meals compared to 38 percent of the third graders in the participating schools. Note: The denominator for the percentages is based on enrollment in only those schools that participate in the National School Lunch Program.

All data presented in the text of this report have been adjusted for non-response.

Table 1
Demographic Characteristics of Third Grade Children Participating in South Dakota's
Oral Health Survey:

All Third Grade Children who Returned a Questionnaire and Third Graders Screened

| Variable | Number | Percent of All Third Graders who Returned a Questionnaire (n=801) |
|--|--------|--|
| Gender: Male Female | 801 | 51.9 48.1 |
| Age: Mean age (standard deviation) Age range | 797 | 8.8 (0.52) 7-11 years |
| Race and Ethnicity: White American Indian/Alaska Native Hispanic African American Asian Native Hawaiian/Pacific Islander | 796 | 82.8 13.6 1.9 1.1 0.5 |
| | | Third Graders who were Screened (n=710) |
| Gender: Male Female | 710 | 49.4 50.6 |
| Age: Mean age (S.D.) Age range | 707 | 8.8 (0.51) 7-10 years |
| Race and Ethnicity: White American Indian/Alaska Native Hispanic African American Asian Native Hawaiian/Pacific Islander | 708 | 83.8 12.6 2.0 1.0 0.5 |

Oral Health Status Indicators (Table 2)

Sixty-seven percent of the third graders screened had decay experience (untreated decay or fillings) in their primary and/or permanent teeth and approximately 30 percent of the third graders had untreated decay at the time of the screening. Slightly more than 25 percent were in need of early dental care while almost five percent of the third graders were in need of urgent dental care because of pain or infection.

Just fewer than 50 percent of the third graders had a dental sealant on at least one permanent molar. Dental sealants provide an effective way to prevent decay on the chewing surfaces of molars (back teeth), which are most vulnerable to dental decay. A clear resin is used to cover the "pits and fissures" on the top of the teeth so that cavity-causing bacteria cannot reach areas that are difficult to clean and for fluoride to penetrate.

Table 2
Oral Health of South Dakota's Third Grade Children
Adjusted for Non-Response

| Variable | Number with Data | Percent of Children | 95 Percent Confidence Interval |
|--|------------------|---------------------|---|
| Caries Free | 710 | 33.1 | 27.0 - 39.2 |
| Caries History | 710 | 66.9 | 60.8 - 73.0 |
| Untreated Decay | 710 | 30.2 | 22.8 - 37.5 |
| Dental Sealants | 710 | 49.6 | 44.2 – 55.0 |
| Treatment Urgency -none -early -urgent | 710 | 70.2 25.3 4.5 | 62.7 - 77.7 18.4 - 32.3 2.6 - 6.3 |

Source: South Dakota Department of Health

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¹ The percent of children with untreated decay is assumed to be an under estimation because radiographs (x-rays) were not taken.

Access to Care Indicators (Tables 3 & 4)

Information on last dental visit and dental insurance was available for 781 and 762 third graders respectively. Some parents returned the questionnaire but refused the screening while other parents returned the questionnaire and granted consent, but their child was absent on the day of the screening.

Most of the parents reported having some type of dental insurance coverage for their child – 24 percent reported government insurance (Medicaid, IHS or both) and 51 percent reported private insurance (private only or private and IHS).

Slightly more than 82 percent of the parents reported that their child had visited the dentist in the last 12 months while five percent reported that their child had never been to the dentist. The primary reasons for not having been to the dentist in the last year were "cost" (n=60), "no reason to go" (n=40), and "difficulty in getting appointment" (n=20).

Table 3
Last Dental Visit and Payment for Dental Care for South Dakota's Third Grade Children
All Third Graders Who Returned a Questionnaire – Not Adjusted for Non-Response

| Variable | Number | Percent of Children | 95 Percent Confidence Interval |
|--|--------|---|--|
| Last Dental Visit: Within last 12 months Within last 2 years 3 or more years ago Never been to dentist | 781 | 82.1 8.1 4.6 5.2 | 79.2 – 84.7 6.3 – 10.3 3.3 – 6.4 3.8 – 7.1 |
| Payment for Dental Care: Cash only Medicaid only Indian Health Service only Private Dental Insurance Don't know Other IHS & Medicaid IHS & Private Insurance | 762 | 22.7 17.1 3.8 50.4 1.2 1.4 2.6 0.8 | 19.8 - 25.9 14.5 - 20.0 2.6 - 5.5 46.8 - 54.0 0.6 - 2.3 0.8 - 2.6 1.7 - 4.1 0.3 - 1.8 |

Source: South Dakota Department of Health

Table 4
Reasons Why Child Had Not Been to Dentist in Last Year

All Third Graders Who Returned a Questionnaire – Not Adjusted for Non-Response

| Reason | Number of Responses |
|---|---------------------|
| Cost | 60 |
| No reason to go | 40 |
| My child is too young to see a dentist | 0 |
| Do not have or know a dentist | 7 |
| Difficulty in getting appointment | 20 |
| Fear, apprehension, pain or dislike going | 10 |
| Cannot get to the dental office/clinic | 8 |
| Other reason | 17 |

Impact of Dental Visit Frequency (Table 5 & Figure 1)

While the majority of parents (82 percent) reported that their child saw a dentist within the last 12 months, almost 18 percent of parents reported that their child had either not seen a dentist in the last year (13 percent) or had never been to the dentist (5 percent). Third graders whose parents reported a dental visit in the last year were significantly more likely to have dental sealants (57 percent vs. 25 percent and 5 percent) and were significantly less likely to have untreated decay (25 percent vs. 47 percent and 59 percent). There was no difference, however, in the proportion that had a history of dental caries (68 percent vs. 64 percent and 59 percent).

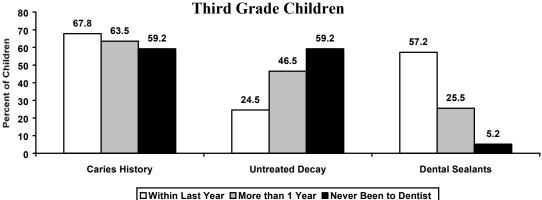
In addition to differences in oral health status, a significantly higher proportion of third graders who had seen the dentist in the last year had private dental insurance (57 percent) compared to those that had not been to the dentist in the last year (18 percent) or had never been to the dentist (24 percent).

Table 5
Oral Health of South Dakota's Third Grade Children Stratified by Time Since Last
Dental Visit - Adjusted for Non-Response

| | Percent of Children (95 Percent Confidence Interval) | | | |
|-------------------------------|--|----------------------|-----------------------|--|
| Variable | Within Last Year | More Than 1 Year Ago | Never Been to Dentist | |
| | (n=564) | (n=92) | (n=39) | |
| White non-Hispanic | 85.3 (79.3-91.3) | 71.0 (53.1-88.9) | 89.5 (82.1-97.0) | |
| With Private Dental Insurance | 56.5 (47.9-65.1) | 17.8 (8.4-27.2)* | 24.2 (7.6-40.9)* | |
| Caries History | 67.8 (61.6-74.0) | 63.5 (53.3-73.8) | 59.2 (46.1-72.3) | |
| Untreated Decay | 24.5 (18.8-30.3) | 46.5 (32.9-60.1)* | 59.2 (46.1-72.3)* | |
| Dental Sealants | 57.2 (51.6-62.9) | 25.5 (12.8-38.1)* | 5.2 (-1.0-11.5)* | |
| Treatment Urgency | | | | |
| None | 76.0 (70.1-81.8) | 53.5 (39.3-67.7)* | 40.8 (27.7-53.9)* | |
| Early | 21.4 (16.0-26.9) | 38.9 (24.1-53.7) | 34.1 (21.8-46.4) | |
| Urgent | 2.6 (1.2-4.0) | 7.6 (2.9-12.4) | 25.1 (10.7-39.6)* | |

^{*} $p \le 0.05$ when compared to third graders with a dental visit within the last year Source: South Dakota Department of Health

Figure 1
Impact of Time Since Last Dental Visit on the Oral Health of South Dakota's



Impact of Race and Ethnicity (Table 6 & Figure 2)

Approximately 84 percent of the third graders screened were white non-Hispanic while almost 13 percent were American Indian. When stratified by race, significant differences in oral health status appeared. Compared to white non-Hispanic third graders, American Indian third graders were significantly more likely to have a history of caries and untreated decay. In addition, a significantly lower proportion of American Indian third graders had private dental insurance.

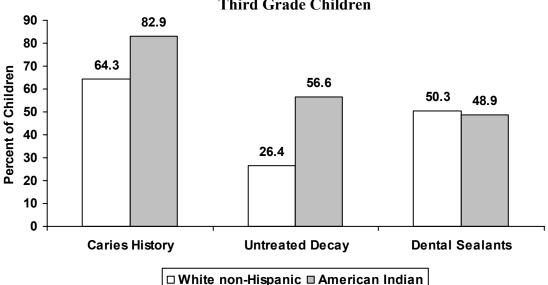
Note: The number of third graders in other minority groups was too small for stratification.

Table 6
Oral Health of South Dakota's Third Grade Children Stratified by Race and Ethnicity
Adjusted for Non-Response

| Variable | Percent of Children (95 Percent Confidence Interval) | | | |
|--------------------------------|--|------------------------|--|--|
| Variable | White Non-Hispanic (n=593) | American Indian (n=89) | | |
| With Dental Visit in Last Year | 82.5 (78.9-86.1) | 68.3 (54.8-81.7) | | |
| With Private Dental Insurance | 56.3 (48.3-64.3) | 20.6 (12.0-29.2)* | | |
| Caries History | 64.3 (58.7-69.8) | 82.9 (73.0-92.8)* | | |
| Untreated Decay | 26.4 (20.7-32.1) | 56.6 (37.5-75.7)* | | |
| Dental Sealants | 50.3 (44.6-55.9) | 48.9 (33.4-64.4) | | |
| Treatment Urgency | | | | |
| None | 74.3 (68.4-80.1) | 41.4 (23.4-59.3)* | | |
| Early | 21.0 (16.2-25.9) | 55.2 (34.8-75.7)* | | |
| Urgent | 4.7 (2.8-6.6) | 3.4 (-1.7-7.9) | | |

^{*} $p \le 0.05$ when compared with white non-Hispanic third graders Source: South Dakota Department of Health

Figure 2
Impact of Race on the Oral Health of South Dakota's
Third Grade Children



Impact of Insurance Type (Table 7 & Figure 3)

When stratified by insurance type (private insurance, government insurance, cash only), significant differences in oral health status appeared. Compared to third graders with private insurance, third graders with government insurance as well as third graders who paid cash for dental care were significantly more likely to have untreated decay and less likely to have visited the dentist in the last year.

Table 7
Oral Health of South Dakota's Third Grade Children Stratified by Dental Insurance Status

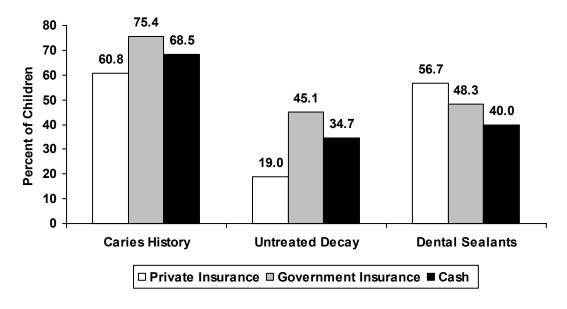
Adjusted for Non-Response

| | Percent of Children (95 Percent Confidence Interval) | | | |
|--------------------------------|--|--|----------------------|--|
| Variable | Private Dental Insurance+ (n=341) | Government Dental Insurance++ (n=163) | Cash Only (n=158) | |
| White non-Hispanic | 90.6 (88.0-93.2) | 55.3 (36.5-74.0)* | 96.3 (93.1-99.5) | |
| With Dental Visit in Last Year | 92.3 (88.3-96.3) | 69.4 (61.2-77.5)* | 69.4 (60.6-78.1)* | |
| Caries History | 60.8 (54.3-67.2) | 75.4 (65.2-85.5) | 68.5 (61.1-75.9) | |
| Untreated Decay | 19.0 (12.4-25.6) | 45.1 (32.7-57.5)* | 34.7 (25.7-43.6)* | |
| Dental Sealants | 56.7 (50.7-62.7) | 48.3 (37.1-59.4) | 40.0 (32.9-47.2)* | |
| Treatment Urgency | | | | |
| None | 80.9 (74.4-87.3) | 55.3 (42.4-68.1)* | 67.0 (57.8-76.3) | |
| Early | 17.4 (11.4-23.4) | 37.0 (23.3-50.6) | 27.2 (18.2-36.1) | |
| Urgent | 1.7 (0.6-2.8) | 7.7 (2.9-12.7)* | 5.8 (2.7-9.0) | |

^{*} p < 0.05 when compared to third graders with private dental insurance

Source: South Dakota Department of Health

Figure 3
Impact of Payment Type on the Oral Health of South Dakota's Third Grade Children



⁺ Includes those who reported private dental insurance plus those who reported both IHS and private dental insurance

⁺⁺ Includes those who reported Medicaid, CHIPS, and/or IHS

Impact of Socioeconomic Status (Table 8 & Figure 4)

Eligibility for the free and/or reduced price meal program is often used as a surrogate measure of socioeconomic status (SES). Since individual level information on SES was not collected, the data were stratified by the proportion of third graders in each school eligible for the free and/or reduced price meal program (<20 percent, 20-49 percent, > 50 percent).

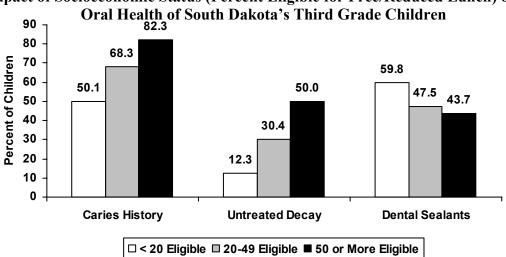
Compared to third graders in higher income schools (<20 percent eligible for F/R meals), third graders in middle and lower income schools were significantly more likely to have a history of caries and to have untreated decay. The proportion of third graders with dental sealants, although higher in higher income schools, was not significantly different.

Table 8
Oral Health of South Dakota's Third Grade Children Stratified by Percent of Students
Eligible for the Free and/or Reduced Price Meal Program -Adjusted for Non-Response

| | Percent of Children (95 Percent Confidence Interval) | | | |
|--|---|--|---|--|
| Variable | < 20 Percent of Students Eligible for F/R Lunch+ (n=162) | 20-49 Percent of Students Eligible for F/R Lunch (n=406) | ≥ 50 Percent of Students Eligible for F/R Lunch (n=142) | |
| White non-Hispanic | 90.2 (85.6-94.7) | 89.3 (86.4-92.2) | 56.1 (24.5-87.7) | |
| With Dental Visit in Last Year | 88.0 (84.0-91.9) | 80.7 (76.7-84.7) | 72.7 (58.6-86.8) | |
| With Private Dental Insurance | 69.8 (59.7-79.9) | 52.6 (48.6-56.7)* | 15.9 (9.0-22.8)* | |
| Caries History | 50.1 (42.9-57.3) | 68.3 (63.0-73.7)* | 82.3 (72.4-92.1) | |
| Untreated Decay | 12.3 (4.1-20.4) | 30.4 (24.1-36.7)* | 50.0 (31.8-68.1) | |
| Dental Sealants | 59.8 (53.7-65.9) | 47.5 (40.6-54.3) | 43.7 (31.1-56.3) | |
| Treatment Urgency None Early Urgent | 88.2 (80.1-96.2) 11.3 (4.1-18.6) 0.5 (-0.5-1.6) | 70.0 (63.5-76.5) 25.0 (19.0-31.0) 5.0 (3.1-6.9) | 50.3 (30.0-70.6)* 42.1 (20.7-63.6)* 7.6 (1.9-13.2)* | |

^{*} p \le 0.05 when compared to schools with less than 20 percent of third graders eligible for the free/reduced price meal program

Figure 4
Impact of Socioeconomic Status (Percent Eligible for Free/Reduced Lunch) on the Oral Health of South Dakota's Third Grade Children



⁺ Includes third graders in the four schools that do not participate in the National School Lunch Program Source: South Dakota Department of Health

Healthy People 2010 Objectives (Table 9)

The National Oral Health Objectives for the Year 2010 (Healthy People 2010) outline several oral health status objectives for young children. For six- to eight-year-old children there are three primary oral health status objectives:

- To decrease the proportion of children who have experienced dental caries in permanent or primary teeth to 42 percent.
- To decrease the proportion of children with untreated dental caries in permanent or primary teeth to 21 percent.
- To increase the proportion of eight-year-olds receiving protective sealing of the occlusal surfaces of permanent molar teeth to 50 percent.

The State of South Dakota has exceeded the Healthy People 2010 objective for dental sealants. Unfortunately, significant progress must still be made in terms of caries history and untreated decay if South Dakota is to meet the other two objectives. About 67 percent of third grade children screened in South Dakota had experienced dental caries – much higher than the HP2010 objective of 42 percent. About 30 percent of the South Dakota third grade children had untreated caries compared to the HP2010 objective of 21 percent. Almost 53 percent of eight-year-old children screened had dental sealants compared to the HP2010 objective of 50 percent.

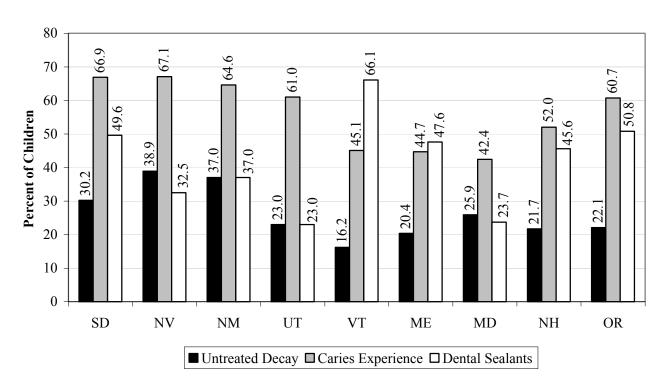
Table 9
Oral Health of South Dakota's Third Grade Children Compared to Healthy People 2010
Adjusted for Non-Response

| | Percent of Children (95 Percent Confidence Interval) | | | | | | | | |
|-----------------|--|---|--|--|--|--|--|--|--|
| Variable | South Dakota Third Grade Children | Healthy People 2010 Objective 6-8 year old children | | | | | | | |
| Caries History | 66.9 (60.8-73.0) | 42 | | | | | | | |
| Untreated Decay | 30.2 (22.8-37.5) | 21 | | | | | | | |
| | 8 Year Olds Only | | | | | | | | |
| Dental Sealants | 52.7 (43.8-61.7) | 50 | | | | | | | |

Comparison to Other States (Figure 5)

Figure 5 compares the oral health of South Dakota's third grade children with the oral health of third grade children from several other states. Each of the states on the graph collected data in a manner similar to South Dakota.

Figure 5
Prevalence of Untreated Decay, Decay Experience, and Dental Sealants in South Dakota's Children Compared to Children from Other States – 3rd Grade Children Only



Source: South Dakota Department of Health
National Oral Health Surveillance System (www.cdc.gov/nohss)

APPENDICES

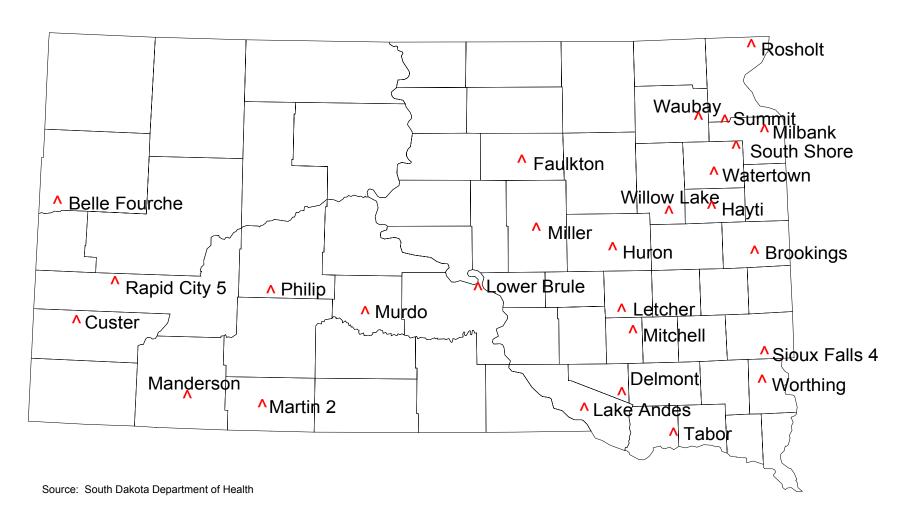
Information about Participating Schools

| City | School Name | School ID | School Type | # Screened | # Enrolled | Percent of Response | * Sample Weight | | | | | | |
|---------------|----------------------|-----------|-------------|------------|------------|------------------------|-----------------|--|--|--|--|--|--|
| Belle Fourche | South Park | 900103 | Public | 77 | 100 | 77.0 | 1.299 | | | | | | |
| Brookings | Central | 500103 | Public | 24 | 33 | 72.7 | 1.375 | | | | | | |
| Custer | Custer | 1600102 | Public | 29 | 47 | 61.7 | 1.621 | | | | | | |
| Delmont | Clearfield Colony | 3300507 | Public | 6 | 7 | 85.7 | 1.167 | | | | | | |
| Faulkton | Faulkton | 2400202 | Public | 17 | 18 | 94.4 | 1.059 | | | | | | |
| Hayti | Hamlin | 2800309 | Public | 43 | 56 | 76.8 | 1.302 | | | | | | |
| Huron | Jefferson | 200204 | Public | 12 | 24 | 50.0 | 2.000 | | | | | | |
| Lake Andes | Andes Central | 1100102 | Public | 11 | 26 | 42.3 | 2.364 | | | | | | |
| Letcher | Letcher | 5500504 | Public | 14 | 16 | 87.5 | 1.143 | | | | | | |
| Lower Brule | Lower Brule | 4230101 | Public | 18 | 28 | 64.3 | 1.556 | | | | | | |
| Manderson | Wounded Knee | 6530201 | BIA | 15 | 19 | 78.9 | 1.267 | | | | | | |
| Martin | Martin | 300103 | Public | 22 | 36 | 61.1 | 1.636 | | | | | | |
| Martin | Riverside | 300107 | Public | 6 | 8 | 75.0 | 1.333 | | | | | | |
| Milbank | St. Lawrence | 2530101 | Private | 16 | 20 | 80.0 | 1.250 | | | | | | |
| Miller | Millerdale Colony | 2900111 | Public | 4 | 5 | 80.0 | 1.250 | | | | | | |
| Mitchell | Gertie Belle Rogers | 1700204 | Public | 48 | 56 | 85.7 | 1.167 | | | | | | |
| Murdo | Murdo | 3700302 | Public | 11 | 11 | 100.0 | 1.000 | | | | | | |
| Philip | Philip | 2700102 | Public | 6 | 14 | 42.9 | 2.333 | | | | | | |
| Rapid City | Calvary Christian | 5132101 | Private | 11 | 15 | 73.3 | 1.364 | | | | | | |
| Rapid City | Grandview | 5100406 | Public | 40 | 80 | 50.0 | 2.000 | | | | | | |
| Rapid City | Rapid Valley | 5100412 | Public | 80 | 111 | 72.1 | 1.388 | | | | | | |
| Rapid City | South Canyon | 5100415 | Public | 34 | 44 | 77.3 | 1.294 | | | | | | |
| Rapid City | Valley View | 5100413 | Public | 19 | 31 | 61.3 | 1.632 | | | | | | |
| Rosholt | Rosholt | 5400402 | Public | 12 | 16 | 75.0 | 1.333 | | | | | | |
| Sioux Falls | Calvin Christian | 4930201 | Private | 27 | 38 | 71.1 | 1.407 | | | | | | |
| Sioux Falls | Mark Twain | 4900529 | Public | 29 | 37 | 78.4 | 1.276 | | | | | | |
| Sioux Falls | SF Lutheran | 4933001 | Private | 12 | 15 | 80.0 | 1.250 | | | | | | |
| Sioux Falls | St. Joseph Cathedral | 4930304 | Private | 11 | 13 | 84.6 | 1.182 | | | | | | |
| South Shore | South Shore | 1400302 | Public | 8 | 9 | 88.9 | 1.125 | | | | | | |
| Summit | Summit | 5400602 | Public | 7 | 10 | 70.0 | 1.429 | | | | | | |
| Tabor | Hutterische Colony | 400218 | Public | 5 | 5 | 100.0 | 1.000 | | | | | | |
| Watertown | St. Martins | 1430301 | Private | 12 | 15 | 80.0 62.5 | 1.250 | | | | | | |
| Waubay | Waubay | 1800302 | Public | 5 | | | 1.600 | | | | | | |
| Willow Lake | Willow Lake | 1200302 | Public | 14 15 | | 93.3 | 1.071 | | | | | | |
| Worthing | Worthing | 4100405 | Public | 5 | 8 | 62.5 | 1.600 | | | | | | |
| All Pa | rticipating Schools | | | 710 | 994 | 71.4 | | | | | | | |

^{*} Sample weight=number enrolled/number screened Source: South Dakota Department of Health

Map of Participating Schools

One school per city unless noted otherwise



South Dakota Department of Health Oral Health Screening Form

| | | | Scre | ening Da | ite | _/ | | | |
|--------------|----------------------------|---|------|----------|--------|--------------|---------------------|--------------------------------|---|
| City | s | chool | Scre | ener | | | _ Nurse _ | | |
| Last Name | First Name Initial Only | Parental Consent ID Form Num- Signed? ber | DOB | Race | Gender | Decay Now | Decay Experience | Sealants on Adult Molars | - |

| Last Name | First Name Initial Only | Parental Consent Form Signed? | ID Num- | DOB | | | | | | | | | | | | | | | | | | | | | | | | | DOB R | | | | | | | | | | | | OB R | | | | DOB I | | | | DOB | | | | DOB I | | | | DOB R | | | DOB | | | DOB | | | | DOB | | | | | | Race | | nder | Decay Decay Now Experience | | Now Experie | | on A Mo | ants dult lars | | Treatm Urgen | су | He | ight | | w | /eigh | t |
|--------------|----------------------------|--|------------|-----|--|-----|--|----|----|--|--|---|---|---|---|---|---|---|---|----|-------|--------|-----|------|----|----|-------|----|-------|--|--|--|--|--|--|--|--|--|--|--|------|--|--|--|-----|--|--|--|-----|--|--|--|-----|--|--|--|-------|--|--|--|-----|--|--|--|-------|--|--|--|-----|--|--|--|-----|--|--|--|-----|--|--|--|-----|--|--|--|-----|--|--|--|-------|--|--|-----|--|--|-----|--|--|--|-----|--|--|--|--|--|------|--|------|-------------------------------|--|-------------|--|------------|----------------------|--|-----------------|----|----|------|--|---|-------|---|
| | | | | Мо | | Day | | Ye | ar | | | M | F | Υ | N | Υ | N | Υ | N | No | Early | Urgent | Inc | ches | | Pc | ounds | s | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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Race

Decay Now:

No = not present Yes = present (>.5 mm or ½ mm & brown)

W = White

NA = Native American
B = Black

H = Hispanic A = Asian

H/PL = Hawaiian/Pacific Islander

O = Other U = Unsure

Source: South Dakota Department of Health

Decay Experience:

Yes =

- has decay now &/or
- has filling or crown &/or
- had adult molar removed due to decay

No =

- · no decay now &/or
- no fillings &/or
- · no adult molars extracted due to decay

Sealants: one or more sealants on a permanent molar

Treatment Urgency:

No = No Obvious Need Early = Early Care Needed Urgent = Urgent Care Needed

South Dakota Department of Health Dental Health Survey Dental Health Survey Consent Form

| | | ID Number |
|---|---|---------------------------------|
| Return th | is form to school tomorrow | |
| Child's Name (Last, First, MI) | | |
| Birthdate (Month/Day/Year) | Child's Age: | Child's Sex: M F |
| Teacher: | | |
| YES, I give permission for my chile If dental problems are detected | - | = |
| NO, I do not give permission for m | y child to receive a dental scr | eening. |
| YES, I give permission for my chile | d to have a height/weight scre | eening. |
| NO, I do not give permission for m | y child to have a height/weigl | nt screening. |
| Signature of Parent or Guardian | Phone Number | Date |
| Please answer the following questions to he If you do not want to answer questions 1, 2 you sign this form giving permission to rec | 2, 3, and 4, your child may stil | |
| 1. When was your child's most recent der12 months2 years3 or | | |
| What is the main reason your child hasCostNo reason to go (no dental problemsMy child is too young to see a dentisDo not have or know a dentist | Difficulty in Fear, apprehe | |
| 3. Is your child's dental care paid for by: Cash Medicaid/Medical Assistance Indian Health Service | (Check all that apply)Private dental insuranDon't knowOther | ce |
| 4. Of the following, which best describesWhiteAmerican Indian | | |
| Please return the white copy of this form to Thank you very much. | your child's teacher. The ye | ellow copy is for your records. |

Notice to Parents of Dental Assessment

Dear Parents: Today, I have completed a dental health assessment. My assessment has found the following finding(s). Your attention is called to the finding(s), so that you may contact your dentist for diagnosis, advise, or treatment. Date of Assessment: ______ Student Name: ______ Finding(s): ______ If you have any questions, please call: ______ Community Health Nurse at: ______ Thank you. Telephone Number SOUTH DAKOTA DEPARTMENT OF HEALTH

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